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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/601,571	09/01/2000	Horst Berneth	LEA 32 509	5874

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03/03/2003

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EXAMINER

HINDI, OMAR Z

ART UNIT

PAPER NUMBER

2873

DATE MAILED: 03/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/601,571

Applicant(s)

BERNETH ET AL.

Examiner

Omar Z. Hindi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Amendment C filed on 11-25-02&2-4-2-03.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7, 8, 10 and 11 is/are rejected.
- 7) ☒ Claim(s) 6, 9, 12 and 13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 August 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☒ Interview Summary (PTO-413) Paper No(s). 15.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: Detailed Action.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1,2,5,7,8,10 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Giraud et al (5846854).

Giraud et al discloses as in claim 1, an electrochromic display element (fig.11) containing an electrochromic medium (fig.11; 26), between two electrode surfaces (fig.11; 23), in which at least one of the electrode surfaces is transparent (col.8 lines 44-45), and has a transparent, electrically conductive layer (this layer has been defined by the applicant as an ITO layer), (see col.8 lines 49-52), characterized in that the at least one transparent electrode surface has a periodic or aperiodic pattern of strips or grid made of metallic conductive material (col.8 lines 44-49).

Giraud et al discloses as in claim 2, the electrochromic display element characterized in that the electrochromic medium is a solution, a gel or a solid (col.11 lines 36-44).

Giraud et al discloses as in claim 5, the electrochromic display element, characterized in that both electrode surfaces have a periodic or aperiodic pattern of strips or grids made of metallic conductive material (fig.11; 23; col.8 44-45).

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Giraud et al discloses as in claim 7, the electrochromic display element, characterized in that the pattern of strips or grid made of metallic conductive material is aperiodic on at least one electrode, (col.8 lines 44-46).

Giraud et al discloses as in claim 8, the electrochromic device characterized in that the periodicity of the pattern of strips on at least one electrode is restricted to a very short distance (fig.11; the distance between strips in the figure).

Giraud et al discloses as in claim 10, the electrochromic display element, characterized in that said pattern of strips or grid on the electrode or electrodes is deposited on the transparent, electrically conductive layer (col.8 lines 44-54).

Giraud et al discloses as in claim 11 the electrochromic display element, characterized in that the transparent, electrically conductive layer on the electrode is deposited on pattern of strips or grid (fig.11; col.8 lines 49-54).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Giraud et al (5846854) as applied to claim 1 in view of Forgette et al (5818625).

Giraud discloses the invention as cited in claim 3 except for electrochromic medium contains at least one pair of redox substances of which one is reducible and

the other is oxidizable, where both are colourless or only slightly coloured and one substance is reduced and the other is oxidized on application of a voltage to the display element, with at least one becoming colored, and after switching off the voltage the two original redox substances are formed again and the display element decolorizes. Within the same field of invention, Forgette discloses the electrochromic medium contains at least one pair of redox substances of which one is reducible and the other is oxidizable, where both are colourless or only slightly coloured and one substance is reduced and the other is oxidized on application of a voltage to the display element, with at least one becoming colored, and after switching off the voltage the two original redox substances are formed again and the display element decolorizes. It would have been obvious for one skilled in the art at the time of the invention was made to use such modification for the purpose of reducing the reflected light intensity; (col.2 lines 40-53 & col.3 lines 3-44).

Forgette discloses as in claim 4, the electrochromic-display element, characterized in that, the reducible and/or oxidizable substances are selected from the group consisting of polymers and polymers which contain at least one of the redox systems mentioned or else pairs of such redox systems (col.3 lines 38-44).

Allowable Subject Matter

5. Claims 6, 9, 12 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter: The prior art taken either singularly or in combination fails to anticipate or fairly suggest the limitations of the claim(s), in such a manner that a rejection under 35 U.S.C. 102 or 103 would be proper. The prior art fails to teach a combination of all the claimed features as presented in claim(s) 12 and 13, wherein the claimed invention comprises pattern of strips of the two electrodes for in an angle with one another and at least one electrode has a minimum mesh spacing of 3mm and optical density of 0.3 and the arrangement of the aperiodic grid is such that the mean of the distance between two neighboring points of intersection of the grid, taken over all points of intersection of the grid, corresponds to the dot spacing of a periodic dot grid having the same size and the same number of grid points and in that the autocorrelation function of the grid decreases rapidly in all directions for values which are greater than said dot spacing. as claimed.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following reference has been cited for having limitation such as electrochromic medium device: Agrawal et al (6317248), Minami et al (6115171), and Nishikitani et al (5940202).

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Omar Z. Hindi whose telephone number is (703) 305-6845. The examiner can normally be reached on Monday-Friday.

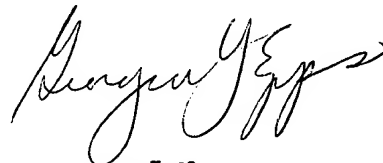
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Y. Epps can be reached on (703) 308-4883. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7724 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.



Omar Z. Hindi
Examiner
Art Unit 2873

OH
February 24, 2003



Georgia Epps
Supervisory Patent Examiner
Technology Center 2800